

**REMARKS**

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested. Claims 1-11 and 15-17 are pending in this application. Claim 1 is the independent claim.

Applicants note with appreciation the Examiner's acknowledgement that the formal drawings filed October 9, 2008 have been accepted. USPTO Action.

**Example Embodiments of the Present Application**

Independent claim 1 recites forming stabilized silicic acid, by hydrolysing a silicon compound into orthosilicic acid and/or oligomers thereof in the presence of a stabilizing agent, which is a quaternary ammonium compound, or an amino-acid, or an amino acid source or combinations thereof. Example non-limiting embodiments of this feature are discussed, for example, on page 2, lines 9-20 of the instant specification. In example embodiments, a stabilizing compound is used including a nitrogen group, although these compounds are known to be highly hygroscopic, e.g., choline chloride.

**Rejections under 35 U.S.C. § 103(a)**

**Vanden Berghe/Bronder**

Claims 1-4, 6-11, and 15-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Vanden Berghe (EP 1 110 909 A1) in view of Bronder

(US 5,922,360). Applicants respectfully traverse this rejection for the reasons detailed below.

The Office Action stated that, regarding instant claim 1, the limitation of the method of preparing a silicic acid extrudate comprising the step of forming a stabilized silicic acid would have been obvious over the method of preparing a silicic acid extrudate, as taught by Vanden Berghe; that the limitation of stabilizing silicic acid in the presence of a stabilizing agent which is a quaternary ammonium compound or an amino acid would have been obvious over the quaternary ammonium compound choline and amine acids proline or serine used to stabilize ortho silicic acid, as taught by Bronder; that the limitation of mixing the stabilized silicic acid with a carrier would have been obvious over the particulate carrier including cellulose or derivatives such as microcrystalline cellulose, hydroxypropyl cellulose, hydroxypropyl methylcellulose, carboxymethylcellulose, cellulose gum, pectin, alginates, sugars or sugar alcohols, lactose, peptides and polypeptides, starch and derivatives, as taught by Vanden Berghe; and that the limitation of extruding the mixture would have been obvious over the extrusion of the mixture, as taught by Vanden Berghe. Applicants respectfully disagree.

The outstanding Office Action on page 3, lines 19-20, acknowledges that Vanden Berghe fails to disclose "the stabilization of orthosilicic acid with a

quaternary ammonium compound such as choline chloride” and relies on the teachings of Bronder for this feature of claim 1.

First, Bronder is not concerned with an extrusion process as recited in claim 1. Further, one skilled in the art would recognize that the “stabilizing agents” of Bronder are solid compounds, and not liquid between -10 and 40 °C, as the solvent agents defined in Vanden Berghe. Therefore, Applicants submit that one skilled in the art would not have been motivated to include the compound in Bronder with the method of preparing a silicic acid extrudate as disclosed in Vanden Berghe.

The Examiner further states that Bronder discloses a solution containing the solid compound choline chloride, and as such discloses intrinsically a stabilizing agent which is liquid between -10 °C and 40 °C. Applicants respectfully submit that the state of matter of the stabilizing agent as defined is not dependent on whether or not it is in a solution, but rather the state of matter is an inherent property of the compound per se. Enclosed is a Material Data Safety Sheet for choline chloride, which shows that the compound would be in a solid state (See Section 9). Therefore, Applicants further submit that one skilled in the art would not have a reasonable expectation of success for using choline chloride as disclosed in Bronder as the stabilizing agent for the method disclosed in Vanden Burghe.

Further, Applicants respectfully submit that an attempt to bring in the isolated teachings of the compound of Bronder into the method of preparing a

silicic acid extrudate of Vanden Berghe would amount to improperly picking and choosing from the different references without regard for the teachings of the references as a whole.<sup>1</sup> In addition, Applicants respectfully submit that incorporating the compound of Bronder into the method of preparing a silicic acid extrudate in Vanden Berghe would change the basic principle of the operation of the method described in Vanden Berghe, because the hygroscopic nature of the compound in Broder is detrimental to several steps of the process of extrusion spheronization.

The Applicants maintain, therefore, that the Action does not present the required "convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references," *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), and that this rejection may not be properly maintained absent such reasoning.

The Applicants, therefore, respectfully request that the rejection to Claim 1 under 35 U.S.C. § 103(a) be withdrawn.

Claims 2-4, 6-11, and 15-16, dependent on independent claim 1, are patentable for the reasons stated above with respect to claim 1 as well as for their own merits.

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<sup>1</sup> See *In re Ehrreich* 590 F2d 902, 200 USPQ 504 (CCPA, 1979) (stating that patentability must be addressed "in terms of what would have been obvious to one of ordinary skill in the art at the time the invention was made in view of the sum of all the relevant teachings in the art, not in view of first one and then another of the isolated teachings in the art," and that one "must consider the entirety of the disclosure made by the references, and avoid combining them indiscriminately.")

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection to independent claim 1 and all claims dependent thereon.

**Vanden Berghe/Bronder/Seguin**

Claims 5 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Vanden Berghe (EP 1 110 909 A1) in view of Bronder (US 5,922,360) and further in view of Seguin et al. (US 6,335,457).

Even assuming *arguendo* that Vanden Berghe and Bronder could be combined with Seguin (which Applicants do not admit), the Examiner has failed to show how Seguin remedies the deficiencies of Vanden Berghe and Bronder with respect to independent claim 1. Thus, claims 5 and 17 are patentable over Vanden Berghe and Bronder and Seguin for the reasons set forth above with respect to independent claim 1.

The Applicants, therefore, respectfully request that the rejection to Claims 5 and 17 under 35 U.S.C. § 103(a) be withdrawn.

**CONCLUSION**

In view of the above remarks and amendments, the Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.


Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) hereby petition(s) for a one (1) month extension of time for filing a reply to the outstanding Office Action and submit the required \$130.00 extension fee herewith.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Erin G. Hoffman, Reg. No. 57,752, at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,  
HARNESS, DICKEY, & PIERCE, P.L.C.

By

  
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